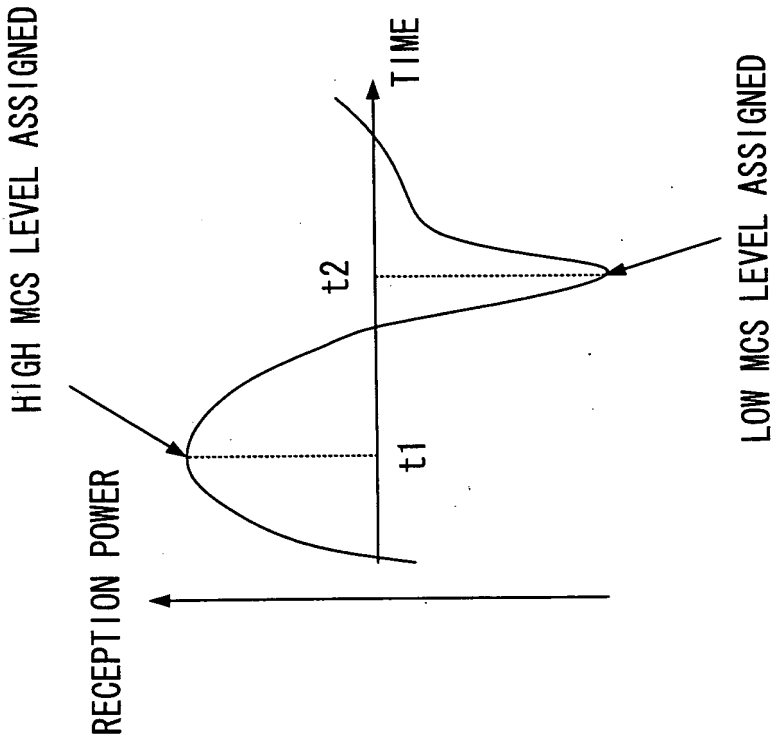
HIGH MCS LEVEL ASSIGNED
TIME
t2
t1
LOW MCS LEVEL ASSIGNED
RECEPTION POWER

FIG.1

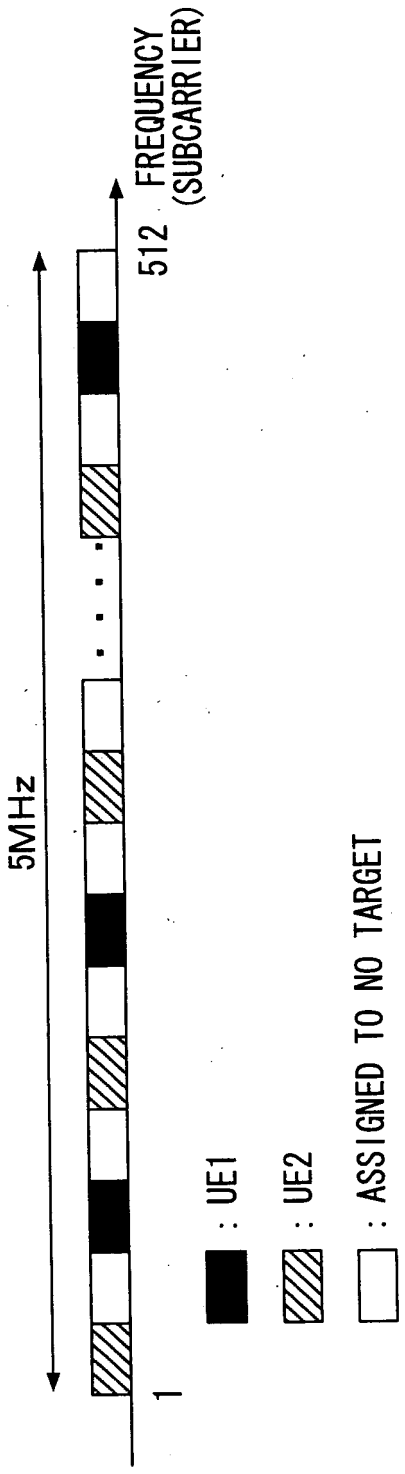
FREQUENCY
(SUBCARRIER)
512
1
5MHz
: UE1
: UE2
: ASSIGNED TO NO TARGET

FIG.2

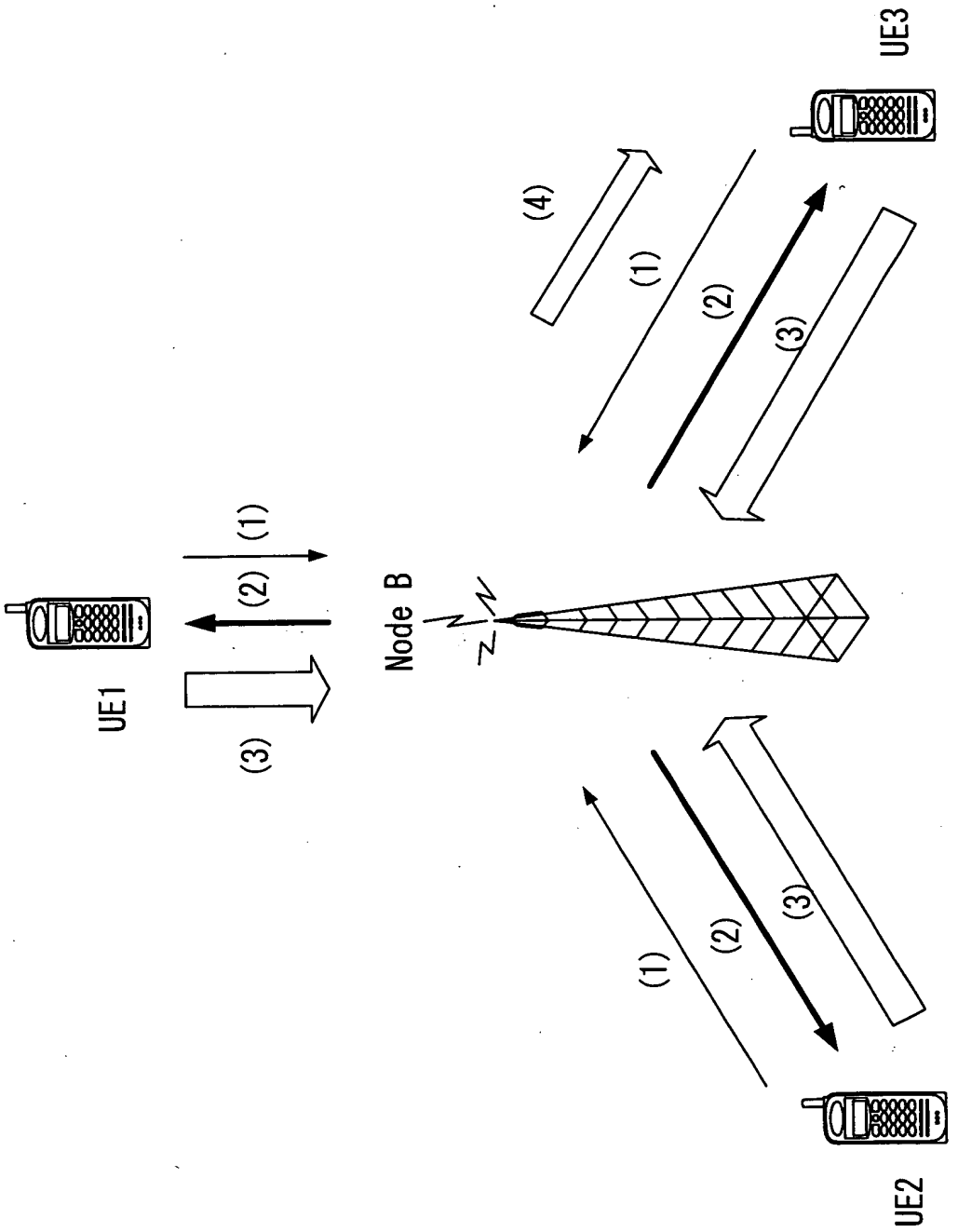

FIG.3

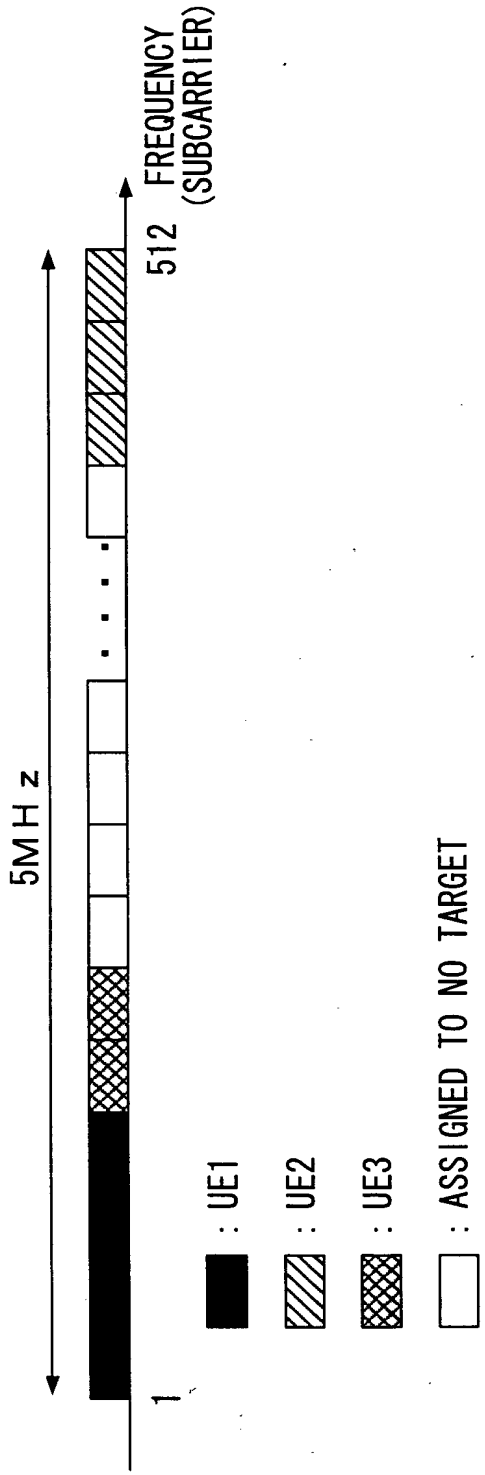
FREQUENCY
(SUBCARRIER)
512
1
5MHz
: UE1
: UE2
: UE3
: ASSIGNED TO NO TARGET

FIG.4

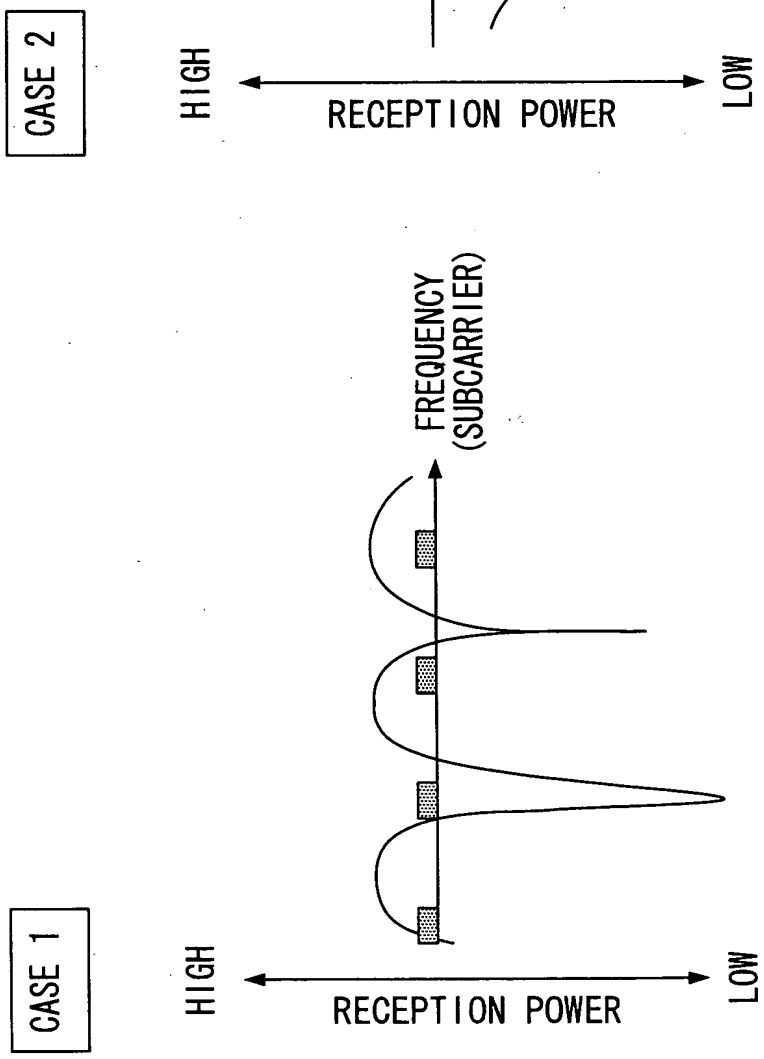
CASE 1
FREQUENCY (SUBCARRIER)
HIGH
LOW
RECEPTION POWER

FIG.5A

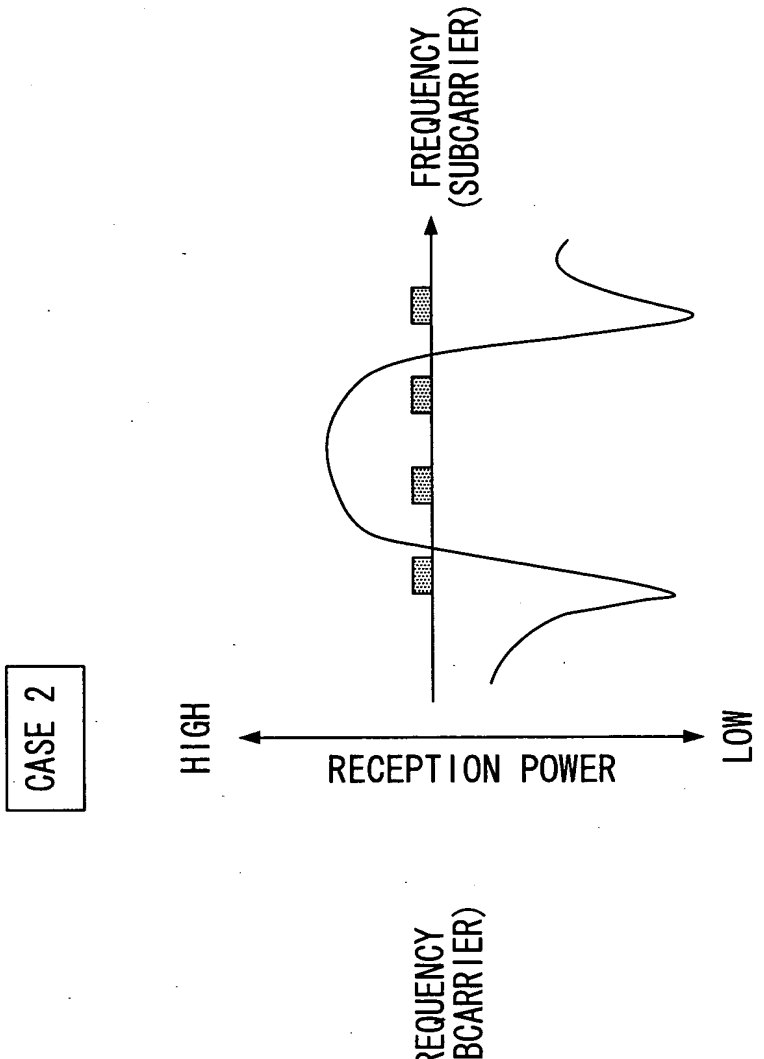
CASE 2
FREQUENCY (SUBCARRIER)
HIGH
LOW
RECEPTION POWER

FIG.5B

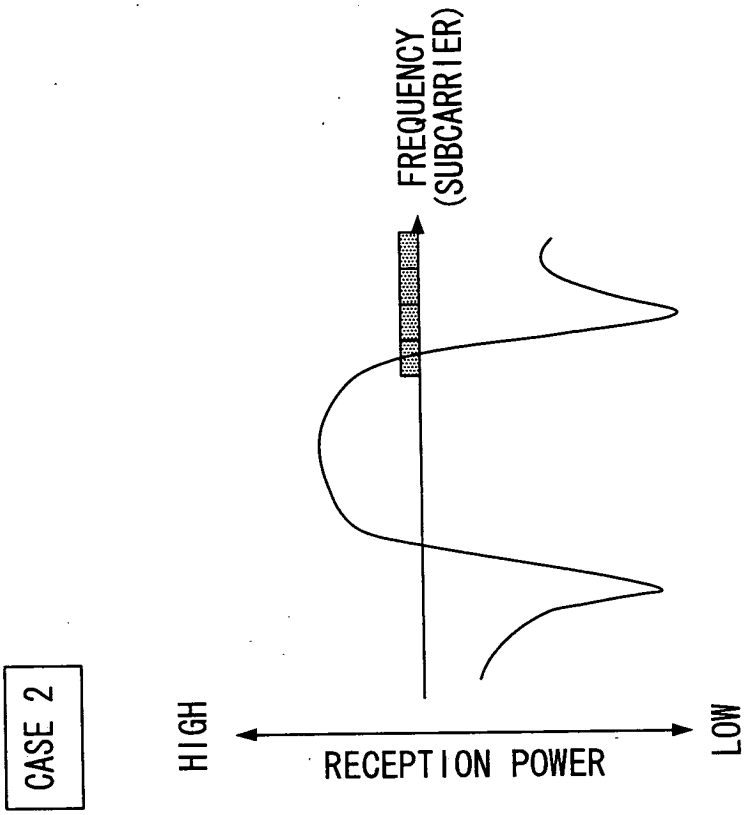
CASE 2
FREQUENCY (SUBCARRIER)
HIGH
RECEPTION POWER
LOW

FIG.6B

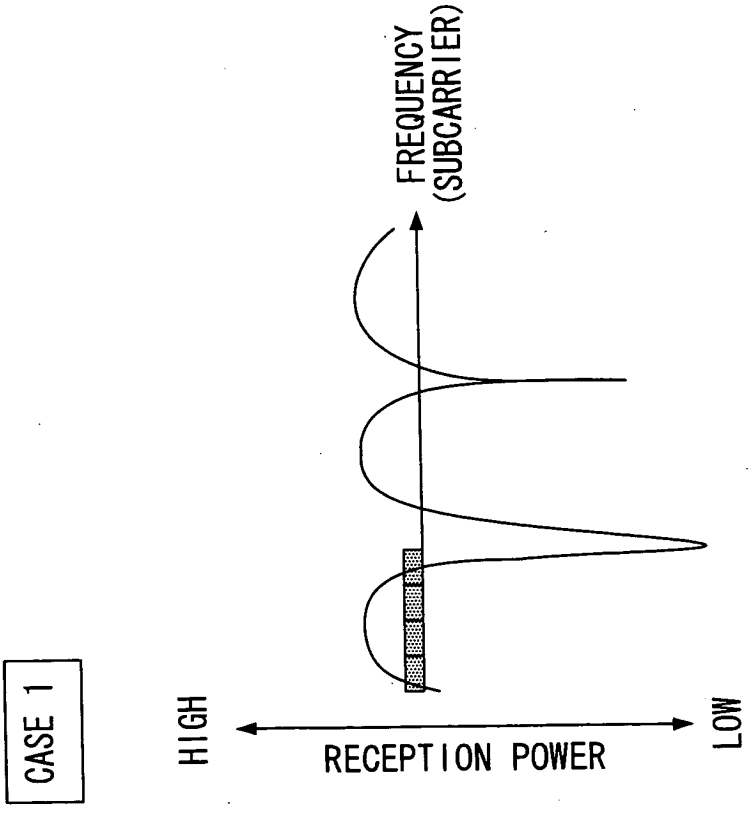
CASE 1
FREQUENCY (SUBCARRIER)
HIGH
RECEPTION POWER
LOW

FIG.6A

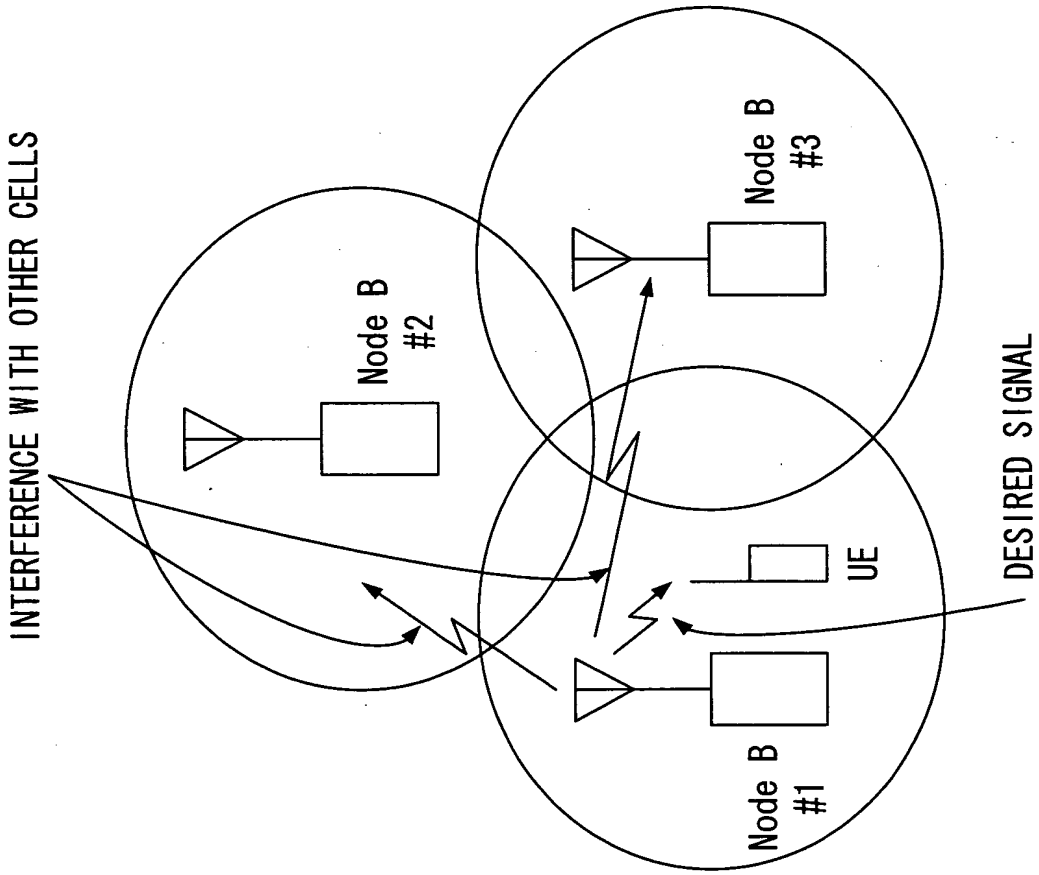
INTERFERENCE WITH OTHER CELLS
Node B #2
Node B #3
UE
DESIRED SIGNAL
Node B #1

FIG.7

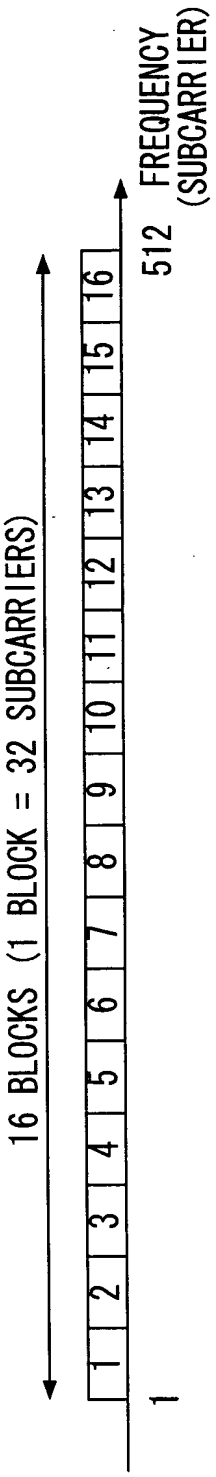
16 BLOCKS (1 BLOCK = 32 SUBCARRIERS)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
1
512
FREQUENCY
(SUBCARRIER)

FIG.8

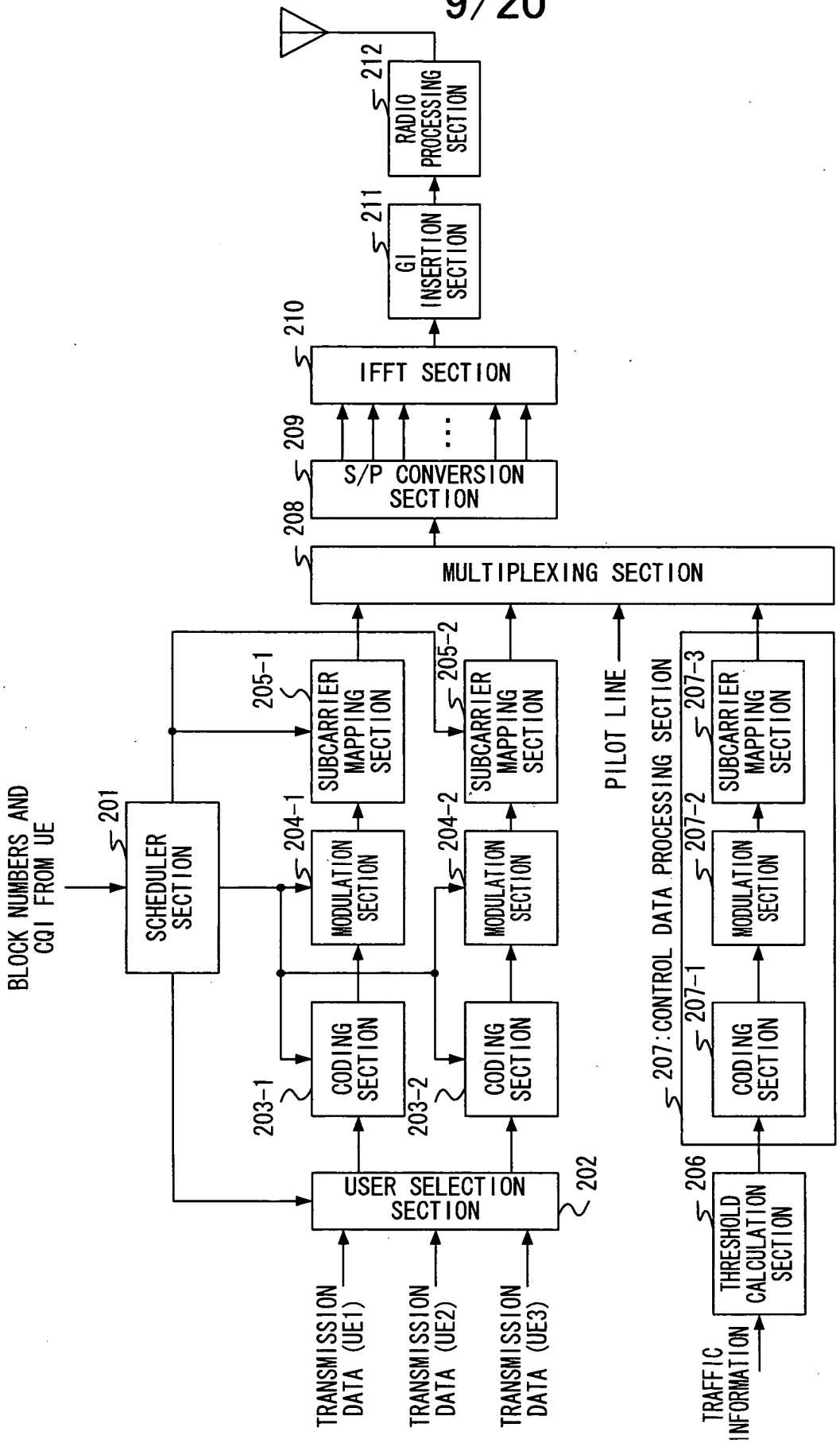
RADIO PROCESSING SECTION
212
GI INSERTION SECTION
211
IFFT SECTION
210
S/P CONVERSION SECTION
209
MULTIPLEXING SECTION
208
SUBCARRIER MAPPING SECTION
205-1
SUBCARRIER MAPPING SECTION
205-2
PILOT LINE
SUBCARRIER MAPPING SECTION
207-3
MODULATION SECTION
204-1
MODULATION SECTION
204-2
MODULATION SECTION
207-2
CODING SECTION
203-1
CODING SECTION
203-2
CODING SECTION
207-1
207:CONTROL DATA PROCESSING SECTION
SCHEDULER SECTION
201
BLOCK NUMBERS AND CQI FROM UE
USER SELECTION SECTION
202
THRESHOLD CALCULATION SECTION
206
TRANSMISSION DATA (UE1)
TRANSMISSION DATA (UE2)
TRANSMISSION DATA (UE3)
TRAFFIC INFORMATION

FIG.9

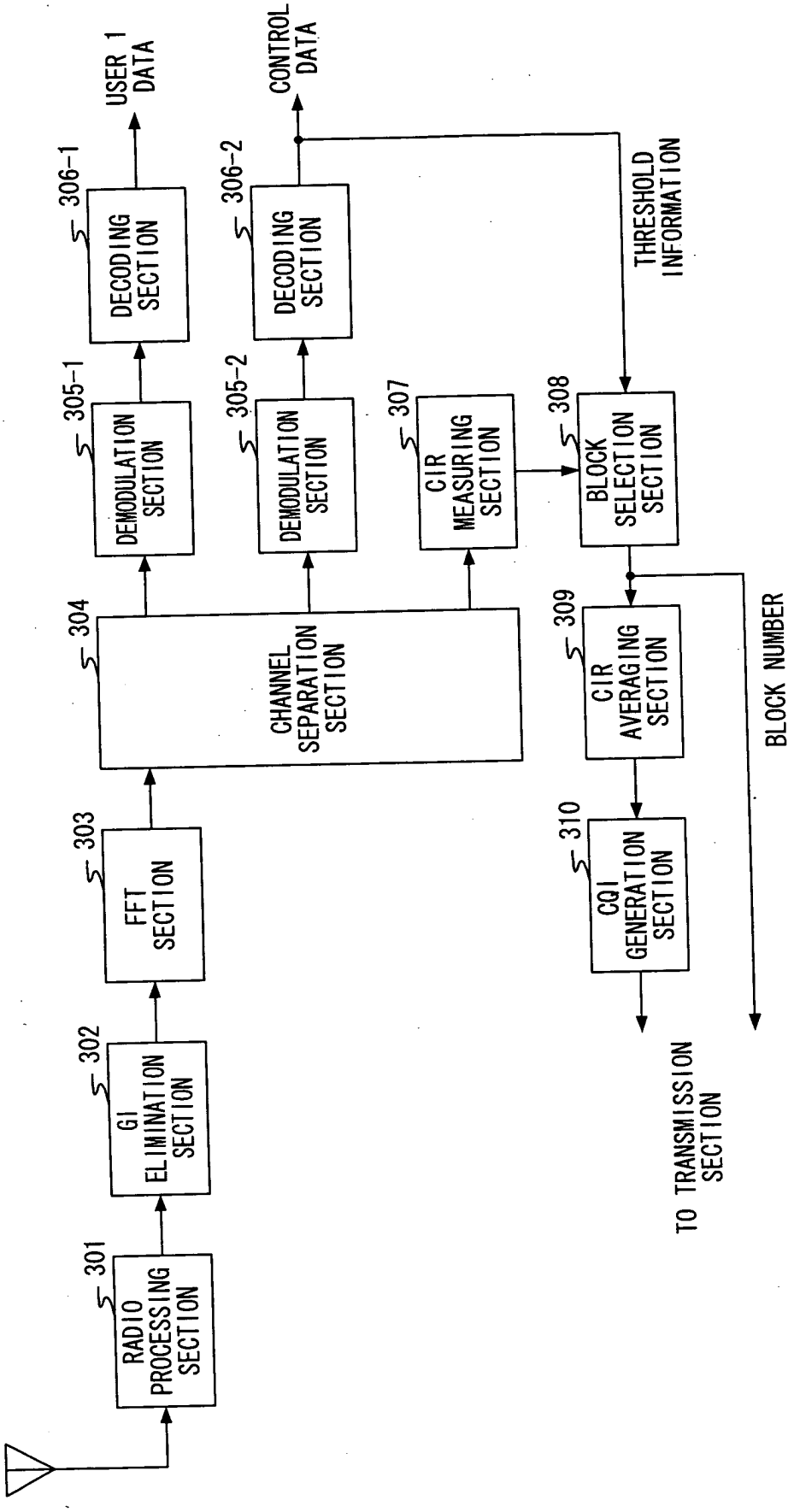
USER 1 DATA
CONTROL DATA
306-1
DECODING SECTION
306-2
DECODING SECTION
THRESHOLD INFORMATION
305-1
DEMODULATION SECTION
305-2
DEMODULATION SECTION
307
CIR MEASURING SECTION
308
BLOCK SELECTION SECTION
304
CHANNEL SEPARATION SECTION
309
CIR AVERAGING SECTION
BLOCK NUMBER
303
FFT SECTION
310
CQI GENERATION SECTION
302
GI ELIMINATION SECTION
TO TRANSMISSION SECTION
301
RADIO PROCESSING SECTION

FIG.10

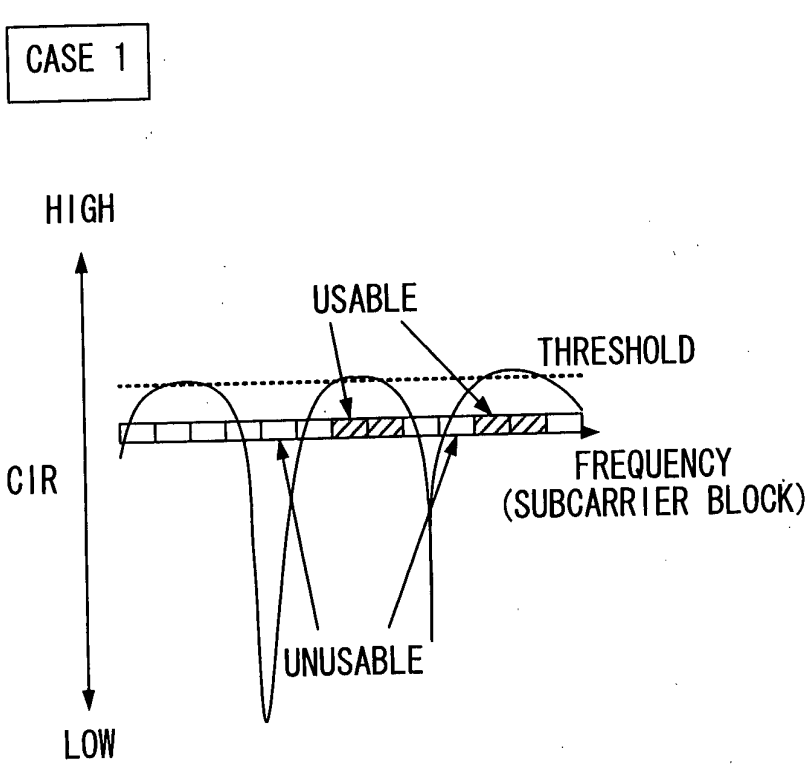

FIG.11A

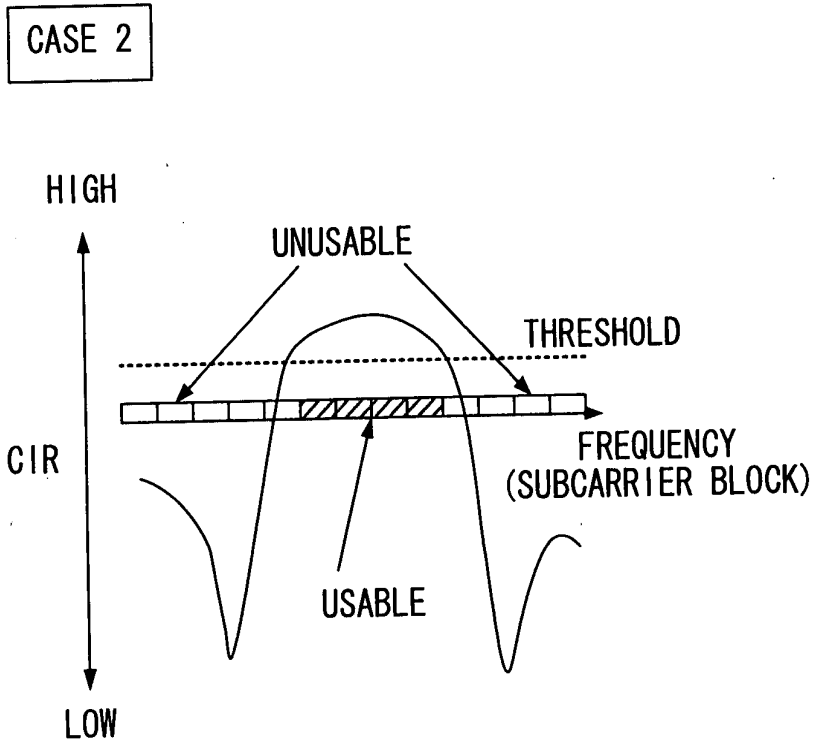

FIG.11B

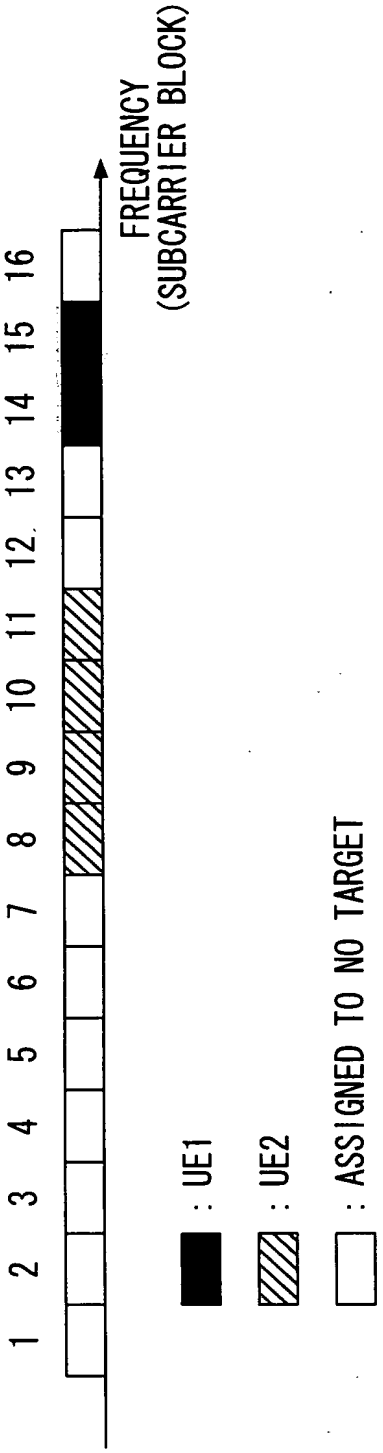
FREQUENCY
(SUBCARRIER BLOCK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
: UE1
: UE2
: ASSIGNED TO NO TARGET

FIG.12

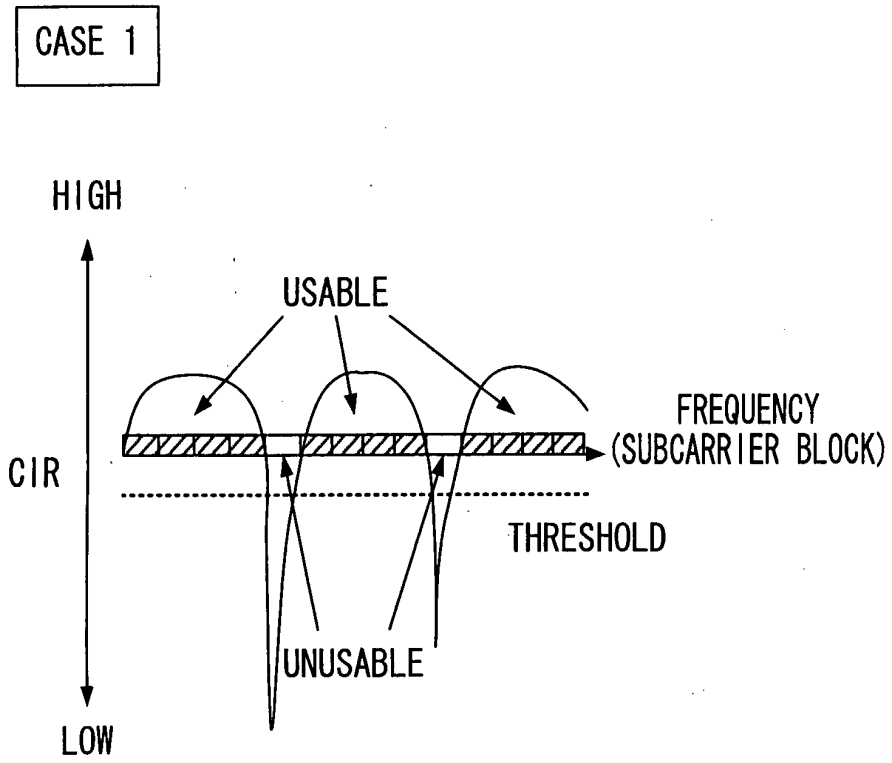

FIG.13A

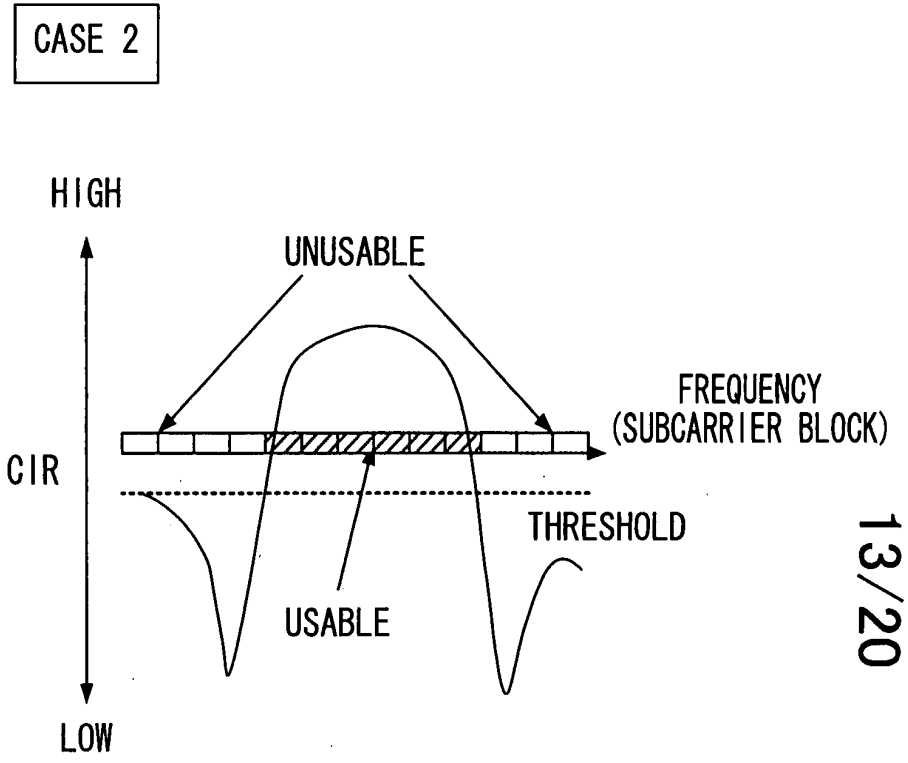

FIG.13B

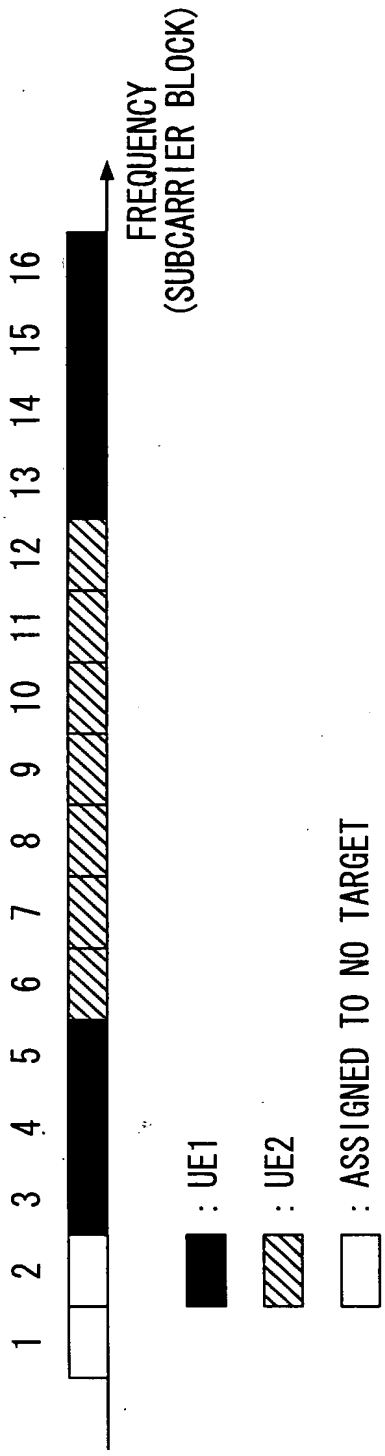
FREQUENCY
(SUBCARRIER BLOCK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
: UE1
: UE2
: ASSIGNED TO NO TARGET

FIG.14

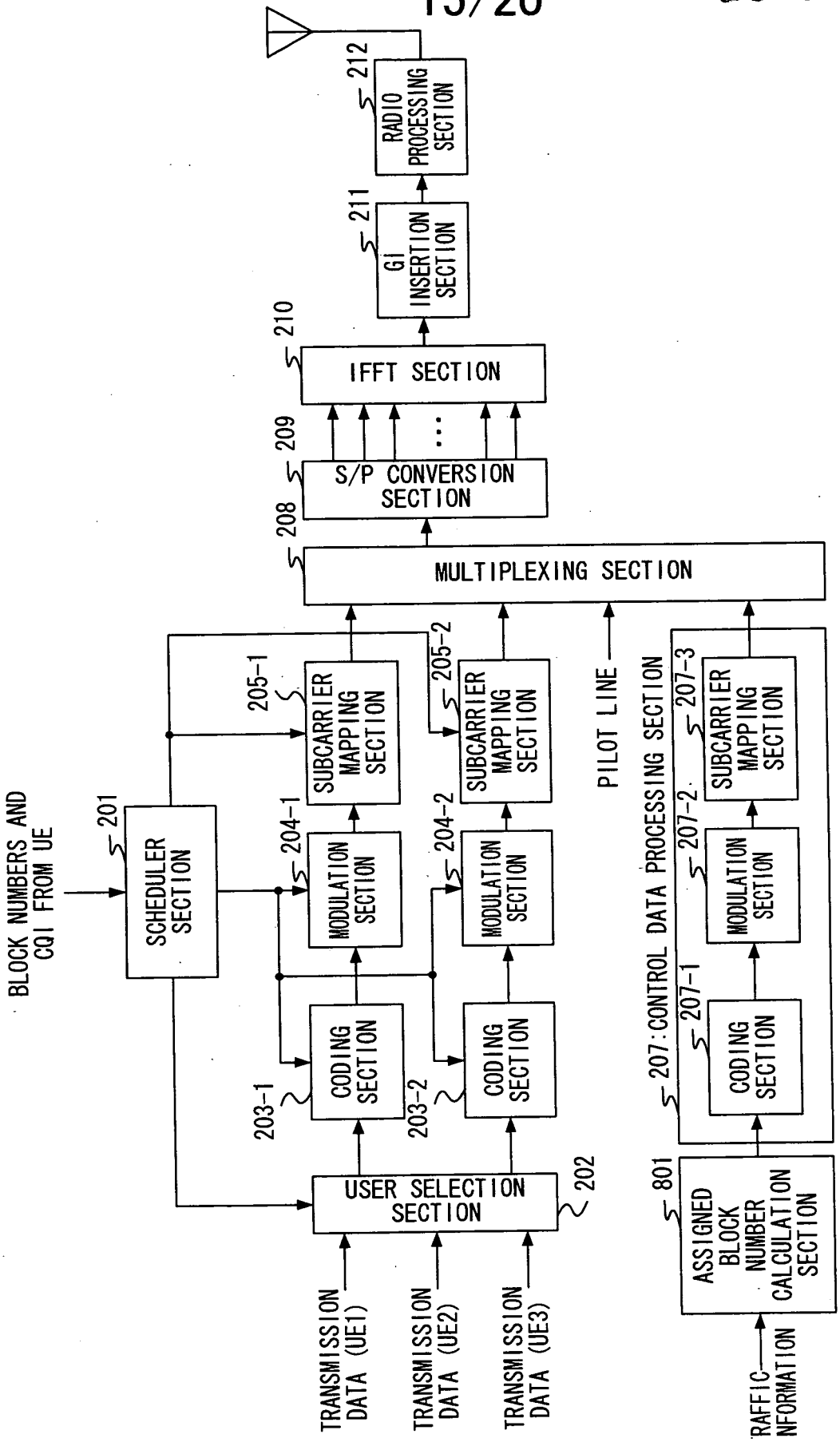
RADIO PROCESSING SECTION
212
GI INSERTION SECTION
211
IFFT SECTION
210
S/P CONVERSION SECTION
209
MULTIPLEXING SECTION
208
SUBCARRIER MAPPING SECTION
205-1
SUBCARRIER MAPPING SECTION
205-2
SUBCARRIER MAPPING SECTION
207-3
PILOT LINE
207:CONTROL DATA PROCESSING SECTION
MODULATION SECTION
204-1
MODULATION SECTION
204-2
MODULATION SECTION
207-2
CODING SECTION
203-1
CODING SECTION
203-2
CODING SECTION
207-1
SCHEDULER SECTION
201
BLOCK NUMBERS AND CQI FROM UE
USER SELECTION SECTION
202
ASSIGNED BLOCK NUMBER CALCULATION SECTION
801
TRANSMISSION DATA (UE1)
TRANSMISSION DATA (UE2)
TRANSMISSION DATA (UE3)
RAFFIC NFORMATION

FIG.15

CASE 1

EXAMPLE OF Nsb=6

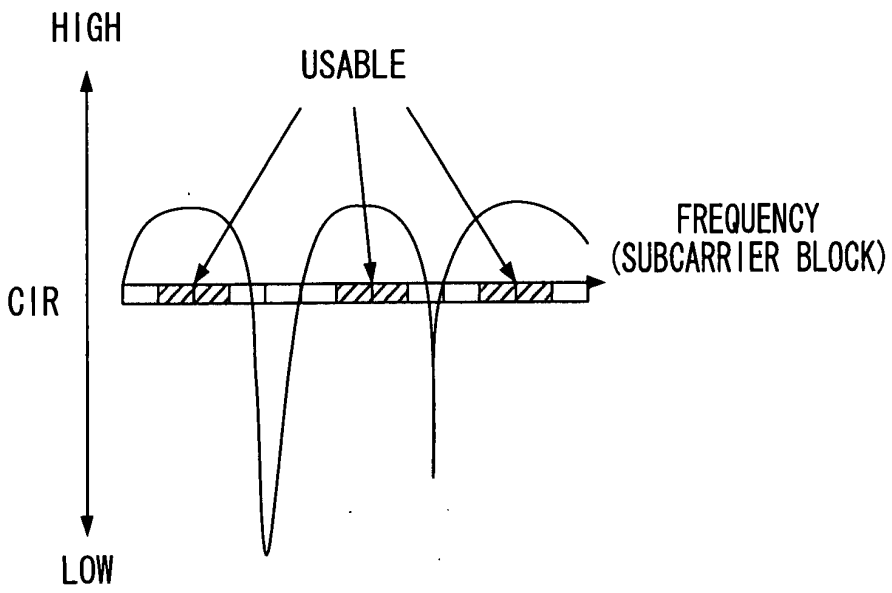

FIG.16A

CASE 2

EXAMPLE OF Nsb=6

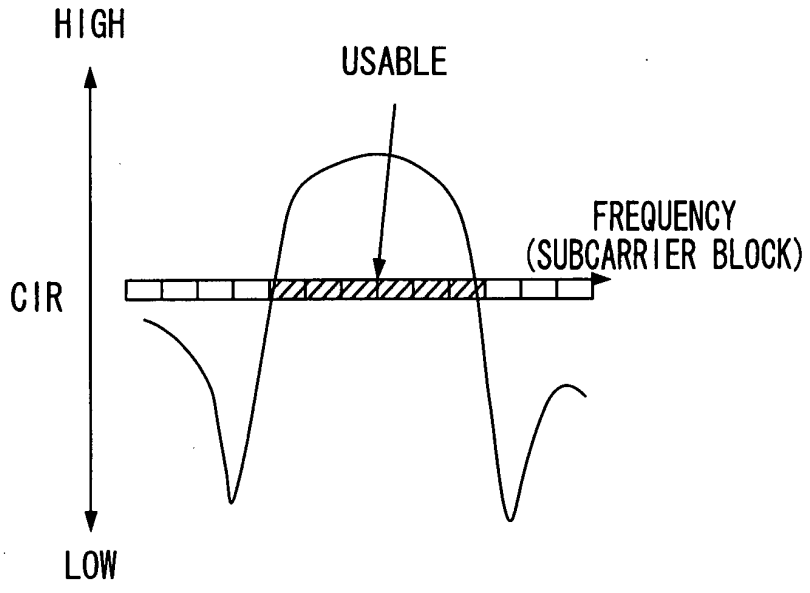

FIG.16B

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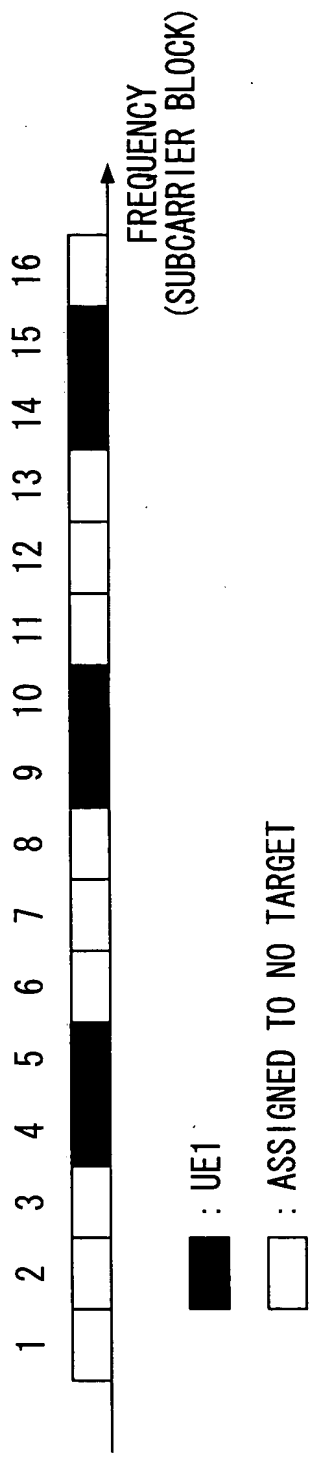
FREQUENCY
(SUBCARRIER BLOCK)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
: UE1
: ASSIGNED TO NO TARGET

FIG.17

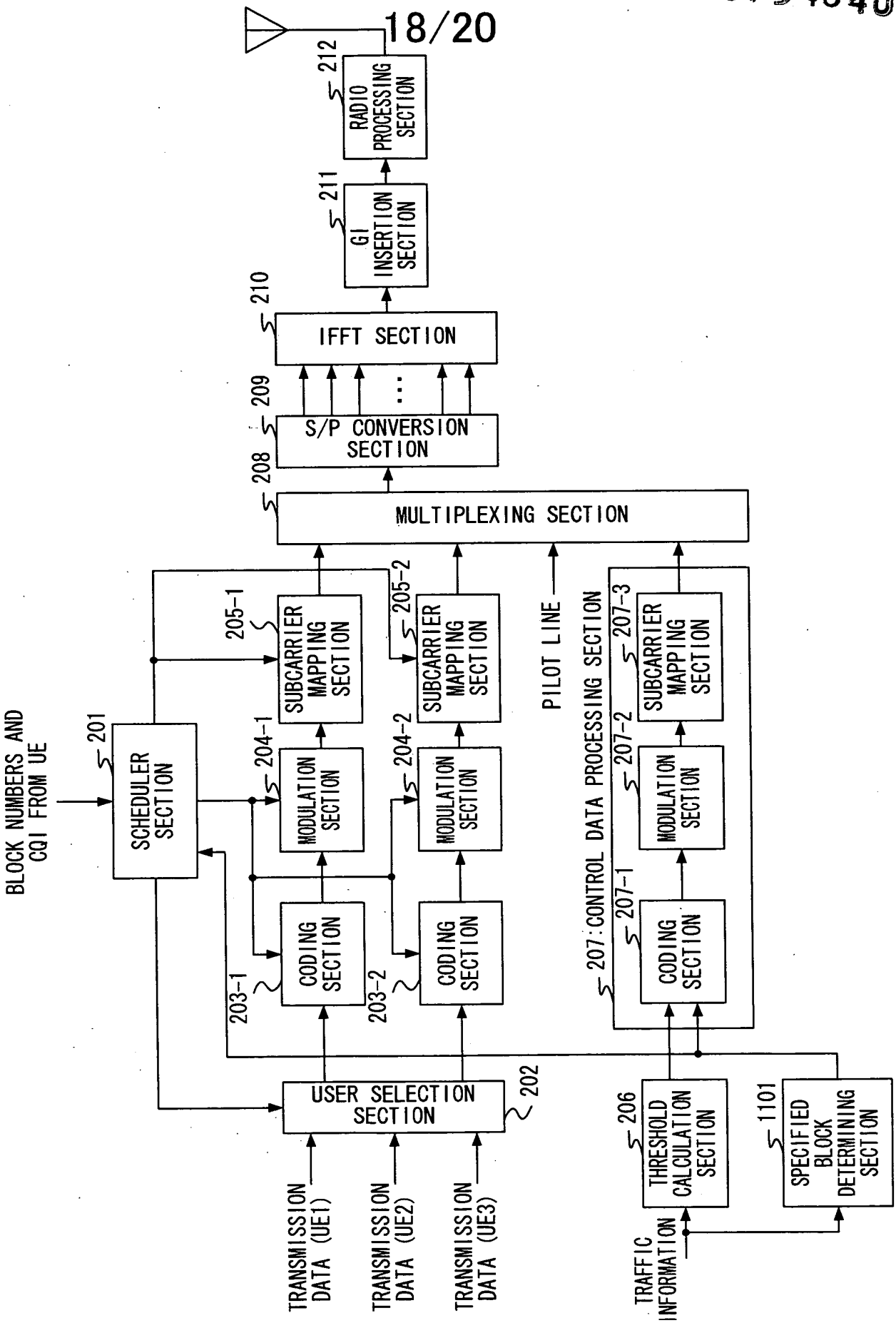
RADIO PROCESSING SECTION
212
GI INSERTION SECTION
211
IFFT SECTION
210
S/P CONVERSION SECTION
209
MULTIPLEXING SECTION
208
SUBCARRIER MAPPING SECTION
205-1
SUBCARRIER MAPPING SECTION
205-2
SUBCARRIER MAPPING SECTION
207-3
PILOT LINE
207:CONTROL DATA PROCESSING SECTION
MODULATION SECTION
204-1
MODULATION SECTION
204-2
MODULATION SECTION
207-2
CODING SECTION
203-1
CODING SECTION
203-2
CODING SECTION
207-1
SCHEDULER SECTION
201
BLOCK NUMBERS AND CQI FROM UE
USER SELECTION SECTION
202
THRESHOLD CALCULATION SECTION
206
SPECIFIED BLOCK DETERMINING SECTION
1101
TRANSMISSION DATA (UE1)
TRANSMISSION DATA (UE2)
TRANSMISSION DATA (UE3)
TRAFFIC INFORMATION

FIG.18

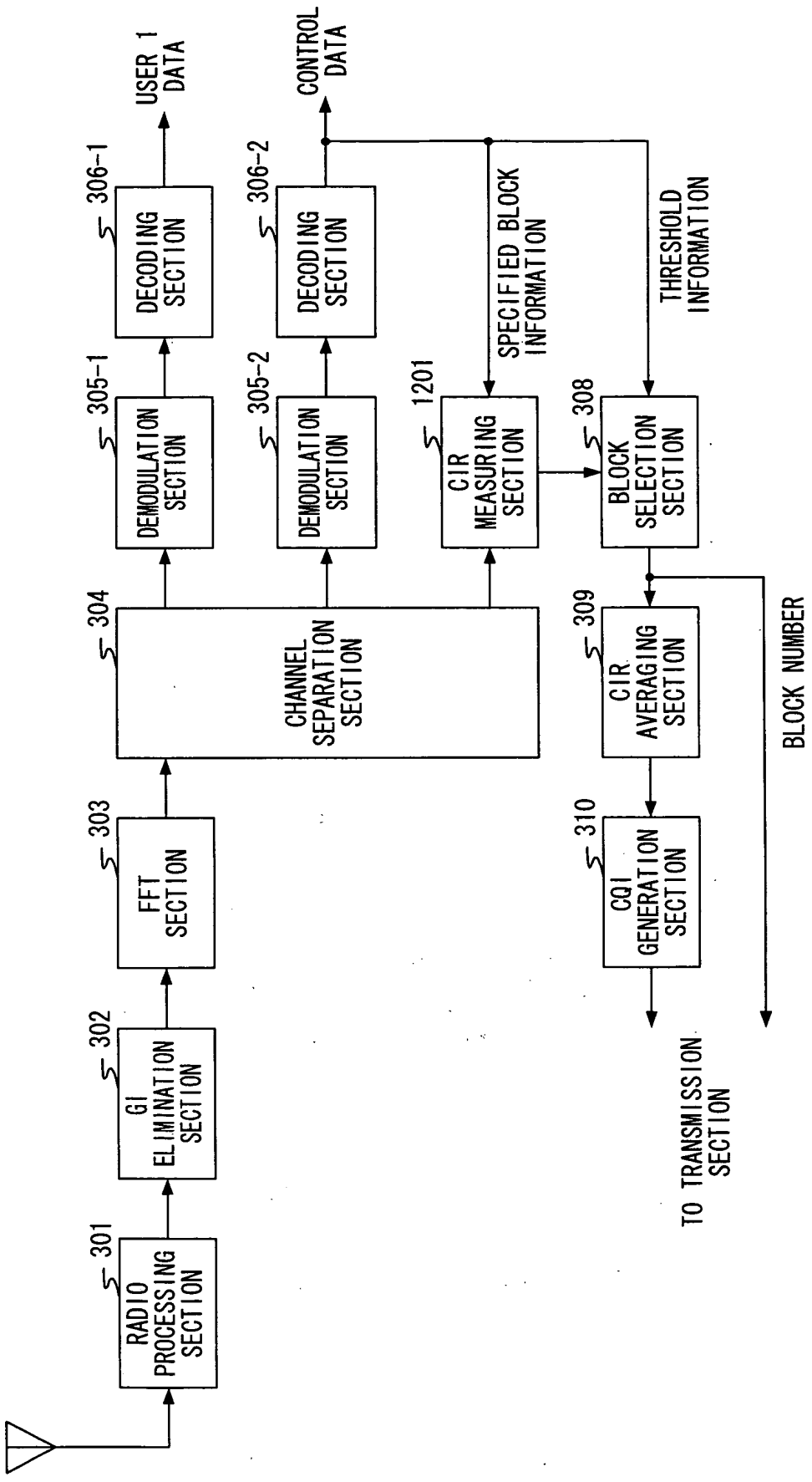
301
RADIO PROCESSING SECTION
302
GI ELIMINATION SECTION
303
FFT SECTION
304
CHANNEL SEPARATION SECTION
305-1
DEMODULATION SECTION
305-2
DEMODULATION SECTION
306-1
DECODING SECTION
306-2
DECODING SECTION
308
BLOCK SELECTION SECTION
309
CIR AVERAGING SECTION
310
CQI GENERATION SECTION
1201
CIR MEASURING SECTION
USER 1 DATA
CONTROL DATA
SPECIFIED BLOCK INFORMATION
THRESHOLD INFORMATION
BLOCK NUMBER
TO TRANSMISSION SECTION

FIG.19

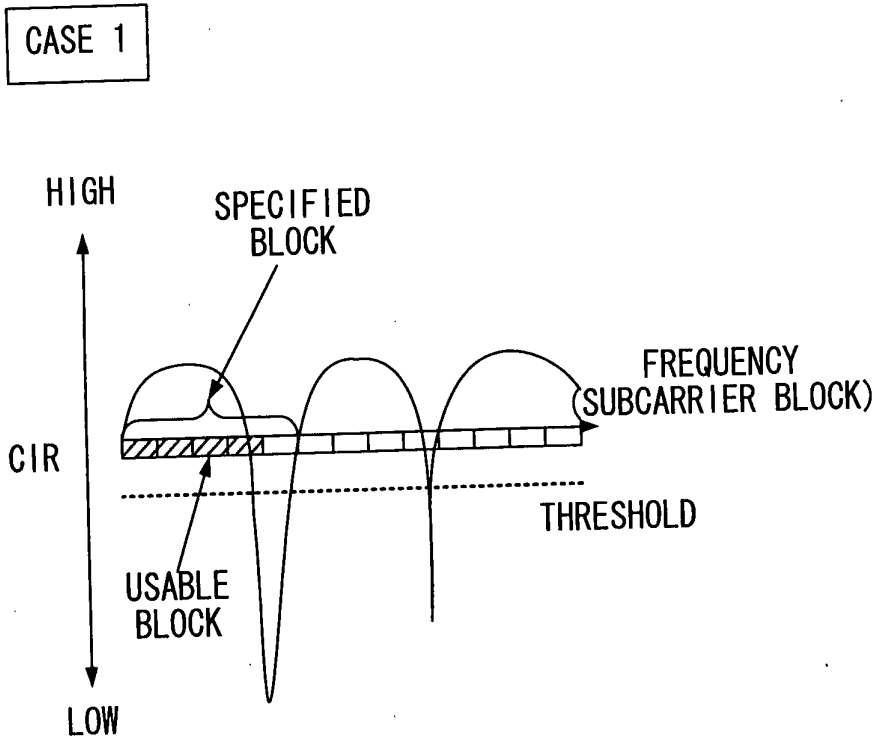

FIG.20A

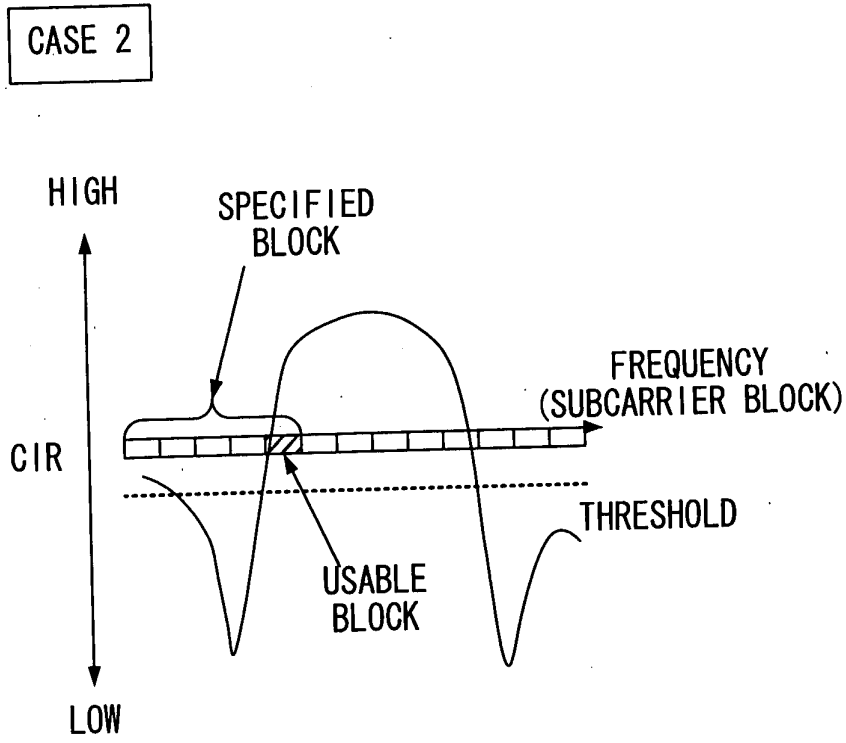

FIG.20B

10/540401